



SEQUENCE LISTING

<110> Masters, David B.

<120> Devices Including Protein Matrix Materials And Methods Of Making And Using Thereof

<130> 45795.23.1

<140> US 09/922,418

<141> 2001-08-03

<160> 21

<170> PatentIn version 3.3

<210> 1

<211> 59

<212> PRT

<213> Artificial

<220>

<223> synthetic construct similar to silk protein

<400> 1

Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala  
1 5 10 15

Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala  
20 25 30

Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
35 40 45

Gly Ala Gly Ala Gly Ser Gly Ala Ala Gly Tyr  
50 55

<210> 2

<211> 6

<212> PRT

<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to silk protein

<400> 2

Gly Ala Gly Ala Gly Ser  
1 5

<210> 3

<211> 71  
<212> PRT  
<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to silk protein containing RGD sequence from fibronectin.

<400> 3

Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala  
1 5 10 15

Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala  
20 25 30

Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
35 40 45

Gly Ala Gly Ala Gly Ser Gly Ala Ala Val Thr Gly Arg Gly Asp Ser  
50 55 60

Pro Ala Ser Ala Ala Gly Tyr  
65 70

<210> 4  
<211> 74  
<212> PRT  
<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to silk protein containing sequence from laminin protein.

<400> 4

Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala  
1 5 10 15

Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala  
20 25 30

Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
35 40 45

Gly Ala Gly Ala Gly Ser Gly Ala Ala Pro Gly Ala Ser Ile Lys Val  
50 55 60

Ala Val Ser Ala Gly Pro Ser Ala Gly Tyr  
65 70

<210> 5  
<211> 73  
<212> PRT  
<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to silk protein containing a different sequence from laminin protein.

<400> 5

Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala  
1 5 10 15

Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala  
20 25 30

Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
35 40 45

Gly Ala Gly Ala Gly Ser Gly Ala Ala Pro Gly Ala Ser Ile Lys Val  
50 55 60

Ala Val Ser Gly Pro Ser Ala Gly Tyr  
65 70

<210> 6  
<211> 71  
<212> PRT  
<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to silk protein containing the RGD sequence from fibronectin.

<400> 6

Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala  
1 5 10 15

Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala  
20 25 30

Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
35 40 45

Gly Ala Gly Ala Gly Ser Arg Tyr Val Val Leu Pro Arg Pro Val Cys  
50 55 60

Phe Glu Lys Ala Ala Gly Tyr  
65 70

<210> 7  
<211> 20  
<212> PRT  
<213> Artificial

<220>  
<223> seq. repeated indefinitely, synthetic construct similar to elastin protein.

<400> 7

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val  
1 5 10 15

Pro Gly Val Gly  
20

<210> 8  
<211> 52  
<212> PRT  
<213> Artificial

<220>  
<223> seq. repeated indefinitely, synthetic construct similar to silk and elastin proteins.

<400> 8

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly  
1 5 10 15

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val  
20 25 30

Gly Val Pro Gly Val Gly Val Pro Gly Ala Gly Ala Gly Ser Gly Ala  
35 40 45

Gly Ala Gly Ser  
50

<210> 9  
<211> 82

<212> PRT  
<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to silk and elastin proteins.

<400> 9

Gly Ala Ala Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly  
1 5 10 15

Val Gly Val Pro Gly Val Gly Val Ala Ala Gly Tyr Gly Ala Gly Ala  
20 25 30

Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala  
35 40 45

Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
50 55 60

Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala  
65 70 75 80

Gly Ser

<210> 10  
<211> 111  
<212> PRT  
<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to silk and elastin proteins.

<400> 10

Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala  
1 5 10 15

Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala  
20 25 30

Gly Ala Gly Ser Gly Ala Ala Gly Tyr Gly Ala Gly Ala Gly Ser Gly  
35 40 45

Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly

50

55

60

Ser Gly Ala Gly Ala Gly Ser Gly Val Gly Val Pro Gly Val Gly Val  
65 70 75 80

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro  
85 90 95

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro  
100 105 110

<210> 11  
<211> 88  
<212> PRT  
<213> Artificial

<220>  
<223> seq. repeated indefinitely, synthetic construct similar to silk and  
elastin proteins.

<400> 11

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly  
1 5 10 15

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val  
20 25 30

Gly Val Pro Gly Val Gly Val Pro Gly Ala Gly Ala Gly Ser Gly Ala  
35 40 45

Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
50 55 60

Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala  
65 70 75 80

Gly Ser Gly Ala Gly Ala Gly Ser  
85

<210> 12  
<211> 108  
<212> PRT  
<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to silk and elastin proteins.

<400> 12

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly  
1 5 10 15

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val  
20 25 30

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly  
35 40 45

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Ala Gly Ala  
50 55 60

Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala  
65 70 75 80

Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
85 90 95

Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
100 105

<210> 13

<211> 128

<212> PRT

<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to silk and elastin proteins.

<400> 13

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly  
1 5 10 15

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val  
20 25 30

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly  
35 40 45

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val

50

55

60

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro  
65 70 75 80

Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala  
85 90 95

Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala  
100 105 110

Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
115 120 125

<210> 14  
<211> 208  
<212> PRT  
<213> Artificial

<220>  
<223> seq. repeated indefinitely, synthetic construct similar to silk and elastin proteins.

<400> 14

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly  
1 5 10 15

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val  
20 25 30

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly  
35 40 45

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val  
50 55 60

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro  
65 70 75 80

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly  
85 90 95

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val  
100 105 110



Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly  
115 120 125

Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val  
130 135 140

Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro  
145 150 155 160

Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala  
165 170 175

Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala  
180 185 190

Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
195 200 205

<210> 15  
<211> 76  
<212> PRT  
<213> Artificial

<220>  
<223> seq. repeated indefinitely, synthetic construct similar to silk and elastin proteins.

<400> 15

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly  
1 5 10 15

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val  
20 25 30

Gly Val Pro Gly Val Gly Val Pro Gly Ala Gly Ala Gly Ser Gly Ala  
35 40 45

Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
50 55 60

Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
65 70 75

<210> 16

<211> 64  
<212> PRT  
<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to silk and elastin proteins.

<400> 16

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly  
1 5 10 15

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val  
20 25 30

Gly Val Pro Gly Val Gly Val Pro Gly Ala Gly Ala Gly Ser Gly Ala  
35 40 45

Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser Gly Ala Gly Ala Gly Ser  
50 55 60

<210> 17  
<211> 56  
<212> PRT  
<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to keratin protein.

<400> 17

Ala Lys Leu Lys Leu Ala Glu Ala Lys Leu Glu Leu Ala Glu Ala Lys  
1 5 10 15

Leu Lys Leu Ala Glu Ala Lys Leu Glu Leu Ala Glu Ala Lys Leu Lys  
20 25 30

Leu Ala Glu Ala Lys Leu Glu Leu Ala Glu Ala Lys Leu Lys Leu Ala  
35 40 45

Glu Ala Lys Leu Glu Leu Ala Glu  
50 55

<210> 18  
<211> 15  
<212> PRT  
<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to collagen protein.

<400> 18

Gly Ala Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro  
1 5 10 15

<210> 19

<211> 39

<212> PRT

<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to collagen protein.

<400> 19

Gly Ala Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly  
1 5 10 15

Ala Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro  
20 25 30

Ala Gly Pro Val Gly Ser Pro  
35

<210> 20

<211> 63

<212> PRT

<213> Artificial

<220>

<223> seq. repeated indefinitely, synthetic construct similar to collagen protein with a cell binding domain from human collagen.

<400> 20

Gly Ala Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly  
1 5 10 15

Ala Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Leu  
20 25 30

Pro Gly Pro Lys Gly Asp Arg Gly Asp Ala Gly Pro Lys Gly Ala Asp  
35 40 45

Gly Ser Pro Gly Pro Ala Gly Pro Ala Gly Pro Val Gly Ser Pro  
50 55 60

<210> 21  
<211> 15  
<212> PRT  
<213> Artificial

<220>  
<223> seq. repeated indefinitely, synthetic construct similar to collagen protein.

<400> 21

Gly Ala Pro Gly Ala Pro Gly Ser Gln Gly Ala Pro Gly Leu Gln  
1 5 10 15